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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,660	09/30/2003	Timothy M. Simon	CHOND.65023	5821

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EXAMINER

WILLSE, DAVID H

ART UNIT	PAPER NUMBER
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3738

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/675,660

Applicant(s)

SIMON ET AL.

Examiner

Dave Willse

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Claim Rejections

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12, 13, 15, 16, 21-23, and 25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Jansson et al., WO 98/52498 A1. Spaced rodlets 1 on the outer periphery define a plurality of ridges (Figure 1), and a lubricious surface is formed at both ends in embodiments comprising agar or gelatine, for example (Derwent abstract, line 7). Regarding claim 13, the ridge planes are substantially perpendicular to a central axis along a transverse cross-section bisecting the cylindrical surface of the pre-formed mass. Regarding claim 15, the ridges are discontinuous in that they each comprise rodlets which “are preferably of spherical or cylindrical sub-units” (Derwent abstract, lines 4-5). Regarding claims 22 and 23, the “approximately identical spaced (3) units” (Derwent abstract, line 3; Figure 1) define bores.

Claims 12, 13, 15, 16, 18, 21, 24, and 25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Oka et al., JP 6-339490 A. Figure 4 illustrates a plurality of ridges extending about a lower or distal portion of an outermost periphery. Since the articular bearing surface 7 is of a polyvinyl alcohol water-bearing gel 6 (JPO English abstract, lines 11-13), there

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are lubricious surfaces at both ends of the artificial articular cartilage 1. Regarding claim 15, the ridges are discontinuous because they are of fiber meshes (Figure 4; JPO English abstract).

Claims 14, 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka et al., JP 6-339490 A. Regarding claim 14, an artificial articular cartilage with a threaded (ridged) surface was well known in the art at the time of the present invention and would have been obvious in order to improve the anchorage into bone, particularly prior to osseointegration, with further motivation have been provided by the last sentence of the JPO English abstract. Regarding claim 17, polyhedral shapes were likewise common in the art and would have been obvious in order to better resist torsional forces. Regarding claim 19, tapered threaded and/or root surfaces would have been an obvious modification in order to enhance self-tapping and/or frictional engagement into the bone, as known to the ordinary practitioner. Regarding claim 20, barb-shaped threads would have been obvious to one of ordinary skill in order to impart a locking function to the implant.

Claims 12-14, 16, 18, 21, 22, 24, and 25 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Stone et al., US 5,306,311, which discloses a lubricious surface (column 7, lines 49-53) and a plurality of ridges (e.g., column 6, lines 3-16). Regarding claim 25: column 3, lines 15-17.

Claims 15, 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stone et al., US 5,306,311. Regarding claims 15 and 20, discontinuous ridges with a barb shaped cross-section would have been an obvious modification to the ordinary practitioner in order to facilitate self-tapping and locking into the bone, with further motivation having been provided by

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the previously cited passage at column 6, lines 3-16. Regarding claim 17, a polyhedral shape would have been obvious in order to better resist torsion.

Response to Applicant's Remarks

Current independent claims 12, 24, and 25 specify that the “plurality of ridges” is an element or part of the “preformed mass” (e.g., claim 12, line 4) as opposed to being an element or part of the “cartilage plug” (e.g., claim 12, line 1) overall. The ridges thus themselves define at least portions of *outermost* peripheries of the preformed mass (e.g., claim 12, lines 4-5), so it must be concluded that the ridges are “formed outward of” *themselves* (e.g., claim 12, lines 4-5). Therefore, the examiner has no choice but to quite broadly interpret the claim language as amended (MPEP § 2111). As noted previously, the original specification (of parent U.S. application serial no. 09/525,437) sets forth numerous definitions of terms (page 16 through 20), but “ridge” and “outermost periphery” are not among them; “[i]t is only when the specification provides definitions for terms appearing in the claims that the specification can be used in interpreting claim language” (MPEP § 2111.01).

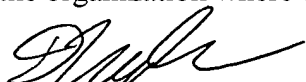
The word “periphery” is defined as “the external boundary or surface of a body” (*Merriam Webster's Collegiate Dictionary*, 10th edition, 1996) and is broad enough to encompass boundaries along any of the three dimensions (e.g., claim 12, lines 2-3) of the preformed mass, particularly since “boundary” is defined as “something (as a line, point, or plane) that indicates or fixes a limit or extent” (*Merriam Webster's Collegiate Dictionary*, 10th edition, 1996). Likewise, “outermost” means “farthest out” (*ibid.*) and is unspecific as to direction (or dimension) and a point (or plane) of reference. In Oka et al., for example, the bone contacting boundary or surface is an outermost periphery relative to the articular bearing surface,

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any of the planforms defined by respective views along each of three dimensions can be viewed as an outermost periphery, and the entire external surface is an outermost periphery.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Willse whose telephone number is 571-272-4762 and who is generally available Monday through Thursday and often on Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Dave Willse
Primary Examiner
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